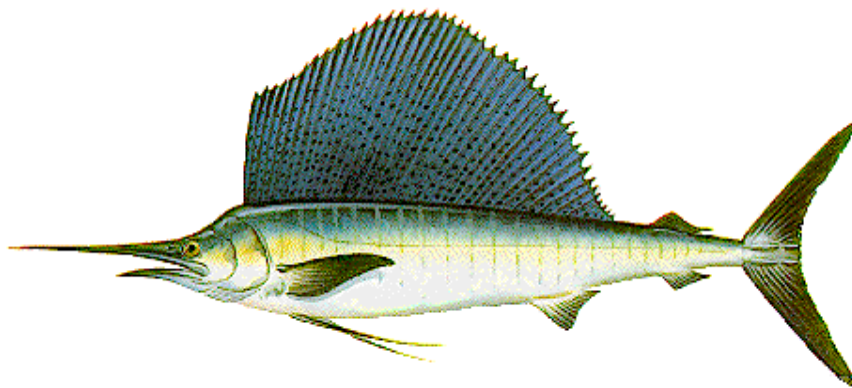


**Amendment 1  
to the  
Atlantic Billfish  
Fishery Management Plan**

Including:  
Revised Final Supplemental Environmental Impact Statement,  
Regulatory Impact Review  
Final Regulatory Flexibility Analysis, and  
Social Impact Assessment/Fishery Impact Statement



April 1999

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## Table of Contents

### Chapter 1 - Introduction

- 1.1 Purpose and Need
  - 1.1.1 History of Management
  - 1.1.2 The HMS Process
  - 1.1.3 Issues/Problems for Resolution
  - 1.1.4 Domestic Considerations
  - 1.1.5 International Considerations
  - 1.1.6 Objectives
- 1.2 Conservation and Management Measures
- 1.3 Management Units
- 1.4 Scientific Data and Research Needs
- 1.5 Development of Fishery Resources
- 1.6 Total Allowable Level of Foreign Fishing
- 1.7 Relationship to International Agreements, Applicable Laws, and Other Fishery Management Plans
  - 1.7.1 ICCAT and its Relationship to ATCA and the Magnuson-Stevens Act
  - 1.7.2 The United Nations Agreement on Straddling Fish Stocks and HMS
  - 1.7.3 Other Fishery Management Plans
  - 1.7.4 Relationship of the FMP Amendment to Existing HMS Management
  - 1.7.5 Paperwork Reduction Act
  - 1.7.6 Coastal Zone Management
  - 1.7.7 Endangered Species Act
  - 1.7.8 Marine Mammal Protection Act
  - 1.7.9 Federalism
  - 1.7.10 Executive Order 12866 (E.O. 12866)
  - 1.7.11 Executive Order 12962 (E.O. 12962)
  - 1.7.12 Applicable State Laws and Policies
- 1.8 What's in the Atlantic Billfish FMP Amendment?
- 1.9 Relationship of the Atlantic Billfish FMP Amendment to Magnuson-Stevens Requirements
- 1.10 List of Preparers
- 1.11 List of Agencies and Organizations Consulted
- References for Chapter 1

### Chapter 2 - Description of Billfish Fisheries

- 2.1 Atlantic Billfish Fishery
  - 2.1.1 Status of the Stocks
  - 2.1.2 International Aspects of the Atlantic Billfish Fishery
    - 2.1.2.1 Participating Nations
    - 2.1.2.2 Fishing Areas
    - 2.1.2.3 Enumeration of Catches
    - 2.1.2.4 Interactions Between Foreign and U.S. Participants
  - 2.1.3 Domestic Aspects of the Atlantic Billfish Fishery
    - 2.1.3.1 Participating User Groups
    - 2.1.3.2 Tournament Fishing
    - 2.1.3.3 Fishing Areas and Seasons
    - 2.1.3.4 Domestic Conflicts

- 
- 2.1.3.5 Amount of Catches and Landings
      - 2.1.3.6 Atlantic Billfish Landing Caps
    - 2.1.4 Description of Economics and Social Characteristics of the Domestic Atlantic Billfish Fishery
      - 2.1.4.1 Recreational Fishery
      - 2.1.4.2 Commercial Fishery
  - 2.2 Gear Types
    - 2.2.1 Recreational Fishing Gear
    - 2.2.2 Commercial Fishing Gear
      - 2.2.2.1 Pelagic Longline Gear
      - 2.2.2.2 Atlantic Pelagic Driftnets
  - 2.3 Current Permitting, Reporting, Data Collection Requirements and Fisheries Monitoring
    - 2.3.1 Monitoring and Reporting Recreational Fisheries
    - 2.3.2 Recreational Fishing Surveys
    - 2.3.3 Recreational Tagging Programs
    - 2.3.4 Monitoring and Reporting Commercial Fisheries
    - 2.3.5 Cooperative Agreements with States
    - 2.3.6 Databases to Support Management Decisions

References for Chapter 2

**Chapter 3 - Rebuilding and Maintaining Atlantic Billfish Fisheries**

- 3.1 Management Under National Standard 1: The MSY Control Rule
  - 3.1.1 Life History Characteristics of Atlantic Billfish
  - 3.1.2 Maximum Fishing Mortality Threshold
  - 3.1.3 Minimum Stock Size Threshold
- 3.2 Overfished Stocks: Managing for Recovery
  - 3.2.1 Rebuilding Biomass Target
  - 3.2.2 Rebuilding Management Strategies
  - 3.2.3 Recovery Periods
  - 3.2.4 Target Control Rule
- 3.3 Healthy Stocks: Managing for OY
  - 3.3.1 Biomass Target After Rebuilding
  - 3.3.2 Precautionary Fishing Mortality Rate
  - 3.3.3 Biomass Approaching Overfished Trigger: Minimum Biomass Flag
  - 3.3.4 Specification of Optimum Yield
- 3.4 Management Measures for Directed Fishing - Possession Restrictions
  - 3.4.1 Size Limits
  - 3.4.2 Retention Limits
  - 3.4.3 Authorized Gear
- 3.5 A Strategy for Bycatch Reduction in HMS Fisheries
  - 3.5.1 Introduction
    - 3.5.1.1 National Standard 9
    - 3.5.1.2 Bycatch Reduction and the Marine Mammal Protection Act
    - 3.5.1.3 Bycatch Reduction and the Endangered Species Act
  - 3.5.2 Evaluation and Monitoring of Bycatch
    - 3.5.2.1 Introduction
    - 3.5.2.2 Atlantic Billfish Bycatch and Bycatch Mortality

- 
- 3.5.2.3 Summary of Bycatch Issues
    - 3.5.3 Reducing Atlantic Billfish Bycatch and Bycatch Mortality
    - 3.5.4 A Strategy for Future Bycatch Reduction
  - 3.6 Interim Milestones During Recovery
    - 3.6.1 Stock Assessment Frequency
    - 3.6.2 Management Options Regarding Recovery Trajectories
  - 3.7 Uncertainty Issues
  - 3.8 Monitoring, Permitting and Reporting
  - 3.9 Extension of the Management Unit and Management Authority
  - 3.10 Safety of Human Life At Sea
    - 3.10.1 Fishery Access and Weather-Related Vessel Safety
    - 3.10.2 Procedures for Consideration of Management Adjustments
  - 3.11 Ongoing Management
    - 3.11.1 An Introduction to FMP amendments and Frameworks
    - 3.11.2 Stock Assessment and Fishery Evaluation Report
    - 3.11.3 Advisory Panel and Continuing Fishery Management
    - 3.11.4 Procedure for Adjusting the Management Measures
- References for Chapter 3

#### **Chapter 4 - Habitat Provisions and Essential Fish Habitat**

- 4.0 Introduction
  - 4.1 Description of Stock in the Management Unit
  - 4.2 Habitat Types and Distribution
    - 4.2.1 Atlantic
    - 4.2.2 Gulf of Mexico
    - 4.2.3 U.S. Caribbean
  - 4.3 Life History Descriptions and Essential Fish Habitat
    - 4.3.1 Introduction
    - 4.3.2 Species Accounts and Essential Fish Habitat
  - 4.4 Threats to Essential Fish Habitat
    - 4.4.1 Fishing Activities That May Adversely Affect EFH
    - 4.4.2 Non-Fishing Threats to EFH
      - 4.4.2.1 Marine Sand and Minerals Mining
      - 4.4.2.2 Offshore Oil and Gas Operations
      - 4.4.2.3 Coastal Development
      - 4.4.2.4 Dredging and Placement of Dredge Material
      - 4.4.2.5 Agriculture (and Silviculture)
      - 4.4.2.6 Aquaculture and Mariculture
      - 4.4.2.7 Navigation
      - 4.4.2.8 Marinas and Recreational Boating
      - 4.4.2.9 Ocean Dumping
    - 4.4.3 Cumulative Impacts
  - 4.5 Research and Information Needs
  - 4.6 Review and Revision of FMP Amendment EFH Components
- References for Chapter 4

#### **Chapter 5 - Regulatory Impact Review and Final Regulatory Flexibility Analysis**

- 
- 5.1 Background
    - 5.1.1 Net Economic Benefit
    - 5.1.2 Economic Impact
    - 5.1.3 Common Misconceptions
    - 5.1.4 RIR vs RFA
  - 5.2 Purpose and Need
  - 5.3 Objectives
  - 5.4 Relevant Federal Rules which may Conflict with the Final Actions
  - 5.5 Regulatory Impact Review
    - 5.5.1 Methodology and Framework for Analysis
    - 5.5.2 Economics of the Atlantic Billfish Recreational Fishery
    - 5.5.3 Economic Impacts of Final Actions and Rationale for Rejected Options
    - 5.5.4 Unavoidable Adverse Impacts
    - 5.5.5 Irreversible and Irretrievable Commitments of Resources
    - 5.5.6 Summary of Expected Changes in Net Benefits
  - 5.6 Final Regulatory Flexibility Analysis
    - 5.6.1 Description of the Compliance and Reporting Requirements
    - 5.6.2 Summary of Comments from the IRFA
    - 5.6.3 Description of Small Entities to which the Final Actions May Apply
    - 5.6.4 Minimizing Impacts to Small Entities
    - 5.6.5 Conclusions

References for Chapter 5

## **Chapter 6 - Revised Final Supplemental Environmental Impact Statement**

- 6.1 Introduction
- 6.2 Purpose and Need for Action
  - 6.2.1 Problems for Resolution
  - 6.2.2 Objectives of the Atlantic Billfish FMP and FMP Amendment
- 6.3 Final Actions
- 6.4 Affected Environment
- 6.5 Environmental Consequences of Fisheries Actions: Effects of the Fishery on the Environment
- 6.6 Unavoidable Adverse Impacts
- 6.7 Irreversible or Irretrievable Commitment of Resources
- 6.8 Mitigating Measures
- 6.9 List of Preparers and Agencies Consulted

## **Chapter 7 - Community Profiles of Atlantic Billfish Fisheries**

- 7.1 Background
  - 7.1.1 Introduction to Community Profiles
  - 7.1.2 Methodology
- 7.2 Billfish Community Profiles
  - 7.2.1 Florida Community Profiles
    - 7.2.1.1 Florida State Profile
    - 7.2.1.2 Florida Community Profile - Islamorada
    - 7.2.1.3 Florida Community Profile - Pompano Beach
    - 7.2.1.4 Florida Community Profile - Madeira Beach
    - 7.2.1.5 Florida Community Profile - Panama City

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7.2.2	Louisiana Community Profiles
7.2.2.1	Louisiana State Profile
7.2.2.2	Louisiana Community Profile - Venice
7.2.3	North Carolina Community Profiles
7.2.3.1	North Carolina State Profile
7.2.3.2	North Carolina Community Profile - Hatteras
7.2.4	Puerto Rico Community Profiles
7.2.4.1	Puerto Rico Territory Profile
7.2.4.2	Puerto Rico Community Profile - Arecibo
7.3	Summary of Impact Assessment
7.4	Fishing Organizations
References for Chapter 7	

## **Appendices**

- |    |  |
|----|--|
| A. | List of Atlantic Billfish Advisory Panel Members                               |
| B. | 1997 and 1998 ICCAT Recommendations for Atlantic Billfish                      |
| C. | Reported ICCAT Atlantic Billfish Catches by Country and Year                   |
| D. | Billfish Tournament Registration and Reporting Forms                           |
| E. | Summary of Comments and Responses on the Draft Atlantic Billfish FMP Amendment |
| F. | Abbreviations and Acronyms Used in the Atlantic Billfish FMP Amendment         |

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## EXECUTIVE SUMMARY

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This is the executive summary for the Fishery Management Plan (FMP) Amendment for Atlantic billfish that inhabit the Atlantic Ocean and adjacent waters. The FMP amendment was developed in coordination with the highly migratory species (HMS) FMP, which integrates management for the Atlantic tuna, swordfish, and shark fisheries, replacing the existing swordfish and shark FMPs. It should be noted that the strategies and objectives of the domestic billfish management program are similar to and consistent with those of the HMS FMP. Indeed, several final actions in the billfish and HMS FMPs are complementary.

Atlantic blue and white marlin, west Atlantic sailfish and longbill spearfish resources present a unique challenge for fisheries management in the United States due to their distributional and behavioral patterns. Atlantic billfish management strategies are guided by international and national mechanisms. Two recent actions have changed the focus of Atlantic billfish management by the United States. On the national level, passage of the 1996 Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) initiated fundamental changes in U.S. fishery management policy, shifting emphasis to precautionary management strategies. In September 1997, the National Marine Fisheries Service (NMFS) listed fishery resources considered to be overfished, including Atlantic blue and white marlin. This agency action triggered a suite of management requirements, including development of a rebuilding plan for overfished stocks, and reduction in bycatch and bycatch mortality. Further, in 1998, west Atlantic sailfish was added to the list of overfished species. In the international arena, the International Commission for the Conservation of Atlantic Tunas (ICCAT) made its first-ever binding recommendation for Atlantic blue and white marlin in 1997, requiring landing reductions of at least 25 percent from 1996 levels by the end of 1999. Improvements in data and monitoring were also included in this recommendation. In 1998, ICCAT adopted a recommendation delaying the Atlantic marlin stock assessment until 2000, when the impact of the 25 percent reductions initiated in 1997, and completed in 1999, can be evaluated. The SCRS will then develop rebuilding scenarios to levels that support maximum sustainable yield, if the available information supports these analyses; similar management actions may follow the 2001 SCRS stock assessment for west Atlantic sailfish.

NMFS recognizes that there must be international cooperation to rebuild ICCAT-managed fisheries. Atlantic billfish mortality levels from commercial (dead discards) and recreational fisheries in the United States during the 1990s averaged 5.2 percent for Atlantic blue marlin, 5.8 percent for white marlin, and 6.6 percent of west Atlantic sailfish, relative to total mortality as reported to ICCAT. Unilateral management action by the United States alone cannot rebuild overfished billfish stocks. Historically, the United States has been a leader in conservation of Atlantic billfish, and has taken actions (e.g., the 1988 Atlantic billfish FMP) to show our willingness to take the critical steps necessary to conserve these stocks. This fact has been a primary negotiation tool at ICCAT, and it is questionable whether recent ICCAT Atlantic billfish

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actions could have occurred without the leadership of the United States, and U.S. fishing communities.

The United States initiated efforts to reduce mortality of Atlantic billfish beginning with the 1988 Atlantic Billfish FMP by requiring the release of all Atlantic billfish, whether alive or dead, caught by commercial fishing operations inside the U.S. Exclusive Economic Zone (EEZ). Regulations were also developed to prohibit the sale of Atlantic billfish from their management unit, and prohibit the possession of billfish onboard commercial fishing vessels inside the U.S. EEZ. Implementation of a minimum size limit further reduced Atlantic billfish mortality rates from the recreational fishery operating in the U.S. EEZ. The 1988 FMP also initiated mandatory tournament reporting as a proxy estimate of total catch and effort for the recreational fishery. Annual recreational landings of Atlantic blue marlin have been reduced since 1988 by approximately 73 percent relative to pre-Atlantic billfish FMP levels (1980 to 1988); annual white marlin recreational landings have declined by approximately 90 percent over the same time frame. In 1997, dead discards from U.S. commercial fisheries (primarily pelagic longline gear) totaled 138.1 mt of Atlantic blue marlin, 70.8 mt of Atlantic white marlin, and 57.7 mt of west Atlantic sailfish.

Development of this FMP amendment began in September 1997 with the formation of the Atlantic Billfish and HMS Advisory Panels (AP). The APs were established under a requirement of the Magnuson-Stevens Act, and are composed of representatives of the commercial and recreational fishing communities, conservation and academic organizations, the five regional fishery management councils involved in Atlantic HMS management, the Atlantic and Gulf coastal states, and the U.S. ICCAT Advisory Committee. Members of the Atlantic Billfish AP and their affiliations are listed in Appendix A. The Atlantic Billfish AP met seven times during development of this FMP amendment, including once during the public comment period on the draft FMP amendment, and provided extensive guidance to NMFS. The FMP amendment does not necessarily reflect all of the views expressed by the AP members, however, input from both APs was extremely helpful in allowing NMFS to consider all aspects of the management issues. NMFS appreciates the contributions of each AP member to the HMS management process, and encourages fishery participants to communicate with AP representatives regarding issues of concern in their fisheries. All AP meetings are open to the public and NMFS holds AP meetings throughout the HMS fishing region.

In October 1997, NMFS prepared and distributed a scoping document, *Issues and Options for Management of Atlantic Billfish*, to serve as the starting point for consideration of issues for this FMP amendment. The scoping document described major issues in the fishery, legal requirements for management, and potential management measures that could be considered for adoption in the FMP amendment. The scoping document was the subject of 21 public hearings that were held in October and November 1997 throughout the management area. The scoping meetings allowed NMFS to gather information from participants in the fisheries, and provided a mechanism by which the public could provide input to NMFS early in the FMP amendment development process.



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Following the scoping meetings, parts of the scoping document were reviewed several times by the Atlantic Billfish AP and interested members of the public; most meetings included some overlap with the HMS AP to allow discussion of issues impacting both plans. Early drafts of portions of the FMP amendment that were considered by the Atlantic Billfish AP reflected new information in both the scientific and management (e.g., the final guidelines to implementation of the National Standards (NS) for fishery conservation and management) spheres.

In October 1998, NMFS announced in the *Federal Register* the availability of the draft FMP amendment. The proposed rule that accompanied this draft FMP was published in the *Federal Register* on January 20, 1999, with a comment period that ended March 12, 1999. Subsequent to the release of the proposed rule, NMFS held 27 public hearings from Texas to Maine and the Caribbean. During the comment period, NMFS received several thousand comments from commercial and recreational fishermen, scientists, conservationists, and concerned individuals. An Atlantic Billfish AP meeting was held toward the end of the comment period to allow AP members to view the comments NMFS had received on the draft FMP amendment and accompanying proposed rule. NMFS considered comments from the public and the AP when preparing this final FMP amendment. Changes to the preferred alternatives from the draft FMP amendment are due, for the most part, to the comments received and to the concerns raised during the public comment period, and other new information or analyses subsequent to the draft FMP amendment.

This FMP amendment includes rebuilding programs for Atlantic billfish that have been designated as “overfished.” The rebuilding program includes status determination criteria that allow managers to determine whether overfishing is occurring or a stock is overfished. The final actions included in the Atlantic billfish FMP amendment are listed below, followed by the section number where the final action can be found in the document. The final actions of the Atlantic billfish FMP amendment will work in concert to maximize the effectiveness of the rebuilding program, given the constraints of U.S. Atlantic billfish mortalities relative to Atlantic-wide levels. Table 1 summarizes final measures affecting recreational fishermen, Table 2 summarizes final measures affecting commercial fishermen, and Table 3 summarizes the ecological, economic, and social impacts of each final action.

Institute size limits for Atlantic blue marlin (99 inches LJFL), Atlantic white marlin (66 inches LJFL), and west Atlantic sailfish (63 inches LJFL) (3.4.1);

Prohibit the retention of longbill spearfish (3.4.2);

Maintain the current prohibitions of commercial possession and retention (3.4.2);

Allow the removal of the hook from Atlantic billfish (3.4.3);

Require permits and logbook reporting, if selected, for charterboats targeting billfish, as part of an HMS charter/headboat system (3.8);

- Implement billfish tournament notification requirements (3.8);  
Institute a June 1 to May 31 fishing year (3.8);

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Develop and implement outreach programs on the methods and benefits of releasing Atlantic billfish alive (3.8); and

Extend management unit for Atlantic marlins to the entire Atlantic Ocean and implement regulatory actions for Atlantic marlin under both the Magnuson-Stevens Act and ATCA (3.9).

Overall, this FMP amendment has simplified the management strategy used to regulate the recreational fishery from proposed measures, without compromising its effectiveness.

Significant changes from the draft Atlantic billfish FMP amendment, include:

Adopt an overall strategy of management of the recreational fishery through size limits (3.4);

An Atlantic billfish bycatch reduction strategy using regulatory actions in the HMS FMP (3.5.3);

No recreational retention limits or hook restrictions (3.4.2, 3.4.3);

A catch-and-release fishery management program for the recreational Atlantic billfish fishery (3.5.3);

- Voluntary observer coverage onboard charterboats targeting HMS, including Atlantic billfish, as part voluntary HMS charter/headboat program (3.8); and
- The foundation to develop an international 10-year Rebuilding Program for Atlantic billfish (3.2.3).

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**Table 1.** What the Atlantic billfish FMP amendment mean to recreational anglers.

Species	Permit Required?	Reporting & Monitoring Requirements	Annual Landings Cap	Retention Limit	Fishing Year	Minimum Size	Bycatch Measures	Other Final Actions
Atlantic Blue Marlin	Yes for charter & headboats only	-Logbooks for charter vessels, if selected - Tournament registration & reporting - Voluntary observer program for charter vessels	26.2 mt	None - Landings controlled through size limits	June 1 to May 31	99 inches LJFL	- Catch-and-release fishery management program established - Outreach programs to reduce handling mortality	- Use of dehooking device allowed. - U.S. flagged vessels and citizens must comply throughout range of stock.
Atlantic White Marlin	Yes for charter & headboats only	-Logbooks for charter vessels, if selected - Tournament registration & reporting - Voluntary observer program for charter vessels	2.48 mt	None - Landings controlled through size limits	June 1 to May 31	66 inches LJFL	- Catch-and-release fishery management program established - Outreach programs to reduce handling mortality	- Use of dehooking device allowed. - U.S. flagged vessels and U.S. citizens must comply throughout range of stock.
West Atlantic Sailfish	Yes for charter & headboats only	-Logbooks for charter vessels, if selected - Tournament registration & reporting - Voluntary observer program for charter vessels	None	None - Landings controlled through size limits	June 1 to May 31	63 inches LJFL	- Catch-and-release fishery management program established - Outreach programs to reduce handling mortality	- Use of dehooking device allowed. - U.S. flagged vessels and U.S. citizens must comply throughout range of stock.
Longbill Spearfish	Yes for charter & headboats only	-Logbooks for charter vessels, if selected - Tournament registration & reporting - Voluntary observer program for charter vessels	Landings Prohibited	Landings Prohibited	June 1 to May 31	N/A	- Catch-and-release fishery management program established - Outreach programs to reduce handling mortality	- Use of dehooking device allowed. - U.S. flagged vessels and U.S. citizens must comply throughout range of stock.

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**Table 2.** What the Atlantic billfish FMP amendment mean to commercial pelagic longline fishermen.

Species	Possession Restrictions	Permits Required	Reporting & Monitoring	Other Restrictions
Atlantic Blue Marlin	Maintain current restrictions (commercial possession and retention is prohibited)	Yes, for swordfish, shark and tuna fisheries	Observer coverage and mandatory logbooks	- Use of dehooking devices allowed - Extension of marlin stock definition to entire Atlantic
Atlantic White Marlin	Maintain current restrictions (commercial possession and retention is prohibited)	Yes, for swordfish, shark and tuna fisheries	Observer coverage and mandatory logbooks	- Use of dehooking devices allowed - Extension of marlin stock definition to entire Atlantic
West Atlantic Sailfish	Maintain current restrictions (commercial possession and retention is prohibited)	Yes, for swordfish, shark and tuna fisheries	Observer coverage and mandatory logbooks	- Use of dehooking devices allowed - Extension of marlin stock definition to entire Atlantic
Longbill Spearfish	Maintain current restrictions (commercial possession and retention is prohibited)	Yes, for swordfish, shark and tuna fisheries	Observer coverage and mandatory logbooks	- Use of dehooking devices allowed - Extension of marlin stock definition to entire Atlantic

**Table 3.** Summary of ecological, social, and economic impacts of final actions of the Atlantic billfish FMP amendment.

Possession Restrictions	Biological:	Social and Economic:
Set minimum size limits for Atlantic blue marlin at 99 inches LJFL, 66 inches LJFL for white marlin and 63 inches LJFL for west Atlantic sailfish.	Would reduce fishing mortality and promote rebuilding. The percent reductions in landings, by weight, (from 1995 to 1997 tournament landing size frequencies) would be: blue marlin -32%; white marlin - 42%; and sailfish - 35%. The increases in minimum size, in addition to reducing landings, will also increase reproductive potential by allowing more females to spawn.	<ul style="list-style-type: none"> <li>- In short-term, the reductions in marlin and sailfish landings associated with increased size limits may cause some decrease in the number of recreational fishermen, particularly in association with billfish tournaments.</li> <li>- Possible increase in net benefits and recreational satisfaction in the long-term as stocks rebuild and encounters with target species become more frequent.</li> </ul>
Prohibit retention of longbill spearfish.	There is only limited knowledge of the biology of this species. Therefore, this alternative would provide for a precautionary management strategy to protect this rarely encountered resource.	Not likely to negatively impact recreational or commercial fisheries since this species is not targeted by either group.
No Action - maintain current commercial prohibitions.	Maintain current restriction on commercial retention and possession.	Without reductions in mortality, negative net benefits in long-term are likely with continued overfishing.
Allow removal of hook from billfish.	Currently all fish are released by cutting the line, leaving the hook in the fish, contributing to an increased mortality rate. There may be a reduction in release mortality by allowing removal of the hook (i.e., dehooking devices). Reducing mortalities associated with encounters with recreational and commercial fishing gear will likely contribute to rebuilding.	Increase in long-term revenue and recreational satisfaction associated with increased targeted species abundance.
<b>Bycatch</b>		
Establish a catch-and-release fishery management program.	Recreational anglers have a strong conservation ethic and release at least 90% or greater of all billfish caught, including fish that could legally be retained. This program recognizes the contributions of these releases toward rebuilding effort. However, release mortality must be evaluated as part of assessment process.	<ul style="list-style-type: none"> <li>- Billfish anglers will likely support a management measure that recognizes their historical, voluntary efforts to reduce billfish mortality.</li> <li>- As billfish stocks rebuild, recreational encounters should increase, resulting in increased recreational satisfaction and long-term net benefits.</li> </ul>

Establish Atlantic Billfish Bycatch Reduction Strategy using management tools available in the HMS FMP.	The HMS FMP will be responsible for designing, analyzing and implementing measures to control bycatch, including Atlantic billfish, in association with all HMS commercial fisheries. NMFS will include an evaluation of progress in the annual SAFE report.	-Short-term (and possible long-term) reduction in revenue possible for commercial vessels impacted by closed areas, particularly if size of vessel prohibits or limits ability to move to alternative fishing areas. - Probable long-term increase in net benefits to recreational fishery by rebuilding of overfished stocks.
<b>Monitoring, Permitting and Reporting</b>		
Require vessel permits for charterboats targeting HMS, including Atlantic billfish. Logbooks will also be required for selected charterboats.	Billfish research and management efforts would be greatly enhanced with a more accurate measure of catch rates and participation levels in the recreational fishery. This action will provide catch and effort information from a sector of the billfish recreational fishery that is not well quantified.	- Better monitoring of recreational landings and effort will result in improved long-term management, although the cost of the permit and time to fill out logbooks may result in some vessels leaving the fishery. - Will likely increase the cost of management and enforcement. - Provides a sampling frame for social and economic surveys.
Establish a voluntary observer program for charterboats targeting HMS, including Atlantic billfish.	Implementation of logbooks for charterboats may necessitate onboard observers to ground-truth data. May become mandatory if observers can not be scheduled to meet a statistically-valid sampling design.	Since this is a voluntary program, no negative social or economic impacts are anticipated. There may be a positive impact on the recreational fleet given an opportunity to participate in the management process.
Implement tournament notification requirements.	To ensure compliance with the 1997 ICCAT recommendation, NMFS will improve monitoring of billfish landings by requiring all tournaments involving billfish to provide notification 4 weeks prior to commencement. This will provide a complete listing of active tournaments thereby allowing appropriate sampling levels to be determined.	- Accurate monitoring of billfish landings will provide the mechanisms to ensure compliance with rebuilding strategies, which will lead to long-term increased recreational satisfaction. - Interim rules implemented during 1998, have not resulted in any reported decline in recreational participation.
Institute a June 1 to May 31 fishing year for Atlantic billfish landings.	This action will allow the United States to implement ICCAT recommendations according to the HMS process.	There should be little or no adverse economic or social impacts as a result of defining a fishing year for reporting of Atlantic billfish landings.
Outreach Programs for commercial and recreational fishermen on the methods and benefits of releasing billfish alive.	Outreach workshops for informational exchange with commercial fishermen and recreational anglers could include proper procedures for measuring, tagging and releasing live fish toward reducing handling and post-release mortality levels.	- Participation in these workshops is voluntary, although the success of the program is predicated on knowing the entire billfish angling universe. - Social acceptance of regulations may increase with a better understanding of management constraints.

Extension of the Management Unit and Management Authority		
Extend management unit for Atlantic blue and white marlin to entire Atlantic Ocean and implement regulatory actions for Atlantic marlin under both Magnuson-Stevens Act and ATCA.	Extension of management unit for blue and white marlin to entire Atlantic will be more consistent with ICCAT, as well as with the biology of the species (based on tagging and genetic research). Implementing regulations under both Magnuson-Stevens Act and ATCA for Atlantic marlins will allow for consistent management for U.S.-flagged vessels throughout the Atlantic and help prevent further overfishing.	Consistent management measures for U.S. vessels operating throughout range of stocks will likely enhance rebuilding of overfished stocks, resulting in long-term increases in net benefits and recreational satisfaction. May result in reduced U.S. recreational participation in foreign fishing locations (e.g., Bahamas) since U.S.-flagged vessels may have to adhere to more restrictive regulations than participants from other countries.